SI 672: Applied Clinical Informatics
Syllabus Fall 2020

Instructor:
Gabriela Marcu (gmarcu@umich.edu)  
Pronouns: she/her/hers

<table>
<thead>
<tr>
<th>Zoom Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>94634310955</td>
</tr>
<tr>
<td>(passcode: thursday)</td>
</tr>
<tr>
<td>97557347076</td>
</tr>
</tbody>
</table>
| (waiting room, please Sign up) | Office Hours | Wed 1:30-2:30pm  
|                   |          | Thurs 10-11am |

Make sure you are logging in to Zoom through U-M.  
If you already had a personal Zoom account, here’s how to migrate it to a U-M account.

Course Description
This course provides students with exposure to decision-making about information systems in real-world clinical settings. Students will engage with clinicians to understand their workflows and processes within the context of their organizations. Through in-class discussions, group projects, reports, and presentations, students will consider the complex range of factors that affect the implementation of clinical information systems. Students will also learn to develop persuasive, strategic recommendations and conduct effective technology implementation evaluations.

COVID Changes
Typically, this course involves regular visits to clinical sites so students can observe workflows and talk to stakeholders. This will not be possible this semester, so we will rely more on guest speakers and case studies to explore real-world issues with information systems in clinical settings.

Learning Objectives
Upon successful completion of this course, students will be able to:

1. Apply basic knowledge of the range of constraints and factors that affect adoption of clinical information systems
2. Critically analyze clinical workflow and processes within their organizational contexts
3. Generate and effectively communicate recommendations for real-world implementation of clinical information systems using principles of change management and interdisciplinary leadership
4. Evaluate the effectiveness of technology implementations in health care
<table>
<thead>
<tr>
<th>Activities</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading annotation on Perusall (weekly)</td>
<td>40%</td>
</tr>
<tr>
<td>Case study reflections and peer reviews (alternating weeks)</td>
<td>40%</td>
</tr>
<tr>
<td>Deep dive on selected topic (once)</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance (weekly, with an alternative written reaction to class recording)</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Reading and Annotating on Perusall**
Weekly readings will include collaboratively annotating and discussing the readings with everyone else in the course, using Perusall. For details see [Perusall instructions and rubric](#).

Course readings will be available online, and will primarily come from the textbook: Finnell, J. T., & Dixon, B. E. (Eds.). (2015). *Clinical informatics study guide: Text and review*. Springer.

**Case Study Reflections and Peer Reviews**
Every other week, you will read a case study and submit a reflection. On alternate weeks, you will be reading another student’s reflection and providing a peer review. We will then discuss the case study together in a class. Complete instructions are here: [Case study reflections and peer reviews](#).

**Deep Dive on a Selected Topic**
With a partner, you will choose one of the course topics, on which to do a deep dive. This will involve reading more extensively on the topic by searching on your own, preparing a paper and presentation, facilitating a discussion, and hosting one or more guest speakers who are experts on the topic. Complete instructions are here: [Deep Dive](#).

**Attendance**
This is a seminar style course, and most of your learning will happen through engagement with peers and guest speakers. This engagement will move fluidly between asynchronous communication (such as annotations on Perusall and peer feedback on Canvas) and synchronous communication (such as our Zoom calls).

Attendance is central to creating an environment conducive to learning in this course, and will be a part of your grade. However, class will be recorded, and anytime you are not able to make
it to class, you can make up those points by submitting a written reaction after watching the recording from that class.

Academic Integrity

Collaboration

- UMSI strongly encourages collaboration while working on some assignments, such as homework problems and interpreting reading assignments as a general practice. Active learning is effective. Collaboration with other students in the course will be especially valuable in summarizing the reading materials and picking out the key concepts. You must, however, write your homework submission on your own, in your own words, before turning it in. If you worked with someone on the homework before writing it, you must list any and all collaborators on your written submission. Each course and each instructor may place restrictions on collaboration for any or all assignments. Read the instructions careful and request clarification about collaboration when in doubt. Collaboration is almost always forbidden for take-home and in class exams.

Plagiarism

- All written submissions must be your own, original work. Original work for narrative questions is not mere paraphrasing of someone else’s completed answer: you must not share written answers with each other at all. At most, you should be working from notes you took while participating in a study session. Largely duplicate copies of the same assignment will receive an equal division of the total point score from the one piece of work.

You may incorporate selected excerpts, statements or phrases from publications by other authors, but they must be clearly marked as quotations and must be attributed. If you build on the ideas of prior authors, you must cite their work. You may obtain copy editing assistance, and you may discuss your ideas with others, but all substantive writing and ideas must be your own, or be explicitly attributed to another. See the (Doctoral, MSI, BSI) student handbooks available on the UMSI intranet for the definition of plagiarism, resources to help you avoid it, and the consequences for intentional or unintentional plagiarism.

Accommodations for Students with Disabilities

If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way we teach may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities (SSD) to help us determine appropriate accommodations. SSD (734-763-3000; ssd.umich.edu/) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. I will treat any information that you provide in as confidential a manner as possible.
**Student Mental Health and Wellbeing**

The University of Michigan is committed to advancing the mental health and wellbeing of its students, while acknowledging that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impacts students’ academic performance.

If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764-8312 and https://caps.umich.edu/ during and after hours, on weekends and holidays. You may also consult University Health Service (UHS) at (732) 764-8320 and https://www.uhs.umich.edu/mentalhealthsvcs, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources.

Since many students are remote during fall 2020, CAPS COVID-19 Support features SilverCloud, an online, self-guided, interactive mental health resource that provides cognitive behavioral interventions.

For a more comprehensive listing of the broad range of mental health services available on campus, please visit: http://umich.edu/~mhealth/

**COVID Statement – 8/12/20**

For the safety of all students, faculty, and staff on campus, it is important for each of us to be mindful of safety measures that have been put in place for our protection. By returning to campus, you have acknowledged your responsibility for protecting the collective health of our community. Your participation in this course on an in-person basis is conditional upon your adherence to all safety measures mandated by the State of Michigan and the University, including maintaining physical distancing of six feet from others, and properly wearing a face covering in class. Other applicable safety measures may be described in the Wolverine Culture of Care and the University’s Face Covering Policy for COVID-19. Your ability to participate in this course in-person as well as your grade may be impacted by failure to comply with campus safety measures. Individuals seeking to request an accommodation related to the face covering requirement under the Americans with Disabilities Act should contact the Office for Institutional Equity. If you are unable or unwilling to adhere to these safety measures while in a face-to-face class setting, you will be required to participate on a remote basis (if available) or to disenroll from the class. I also encourage you to review the Statement of Students Rights and Responsibilities, which includes a COVID-related Statement Addendum.